Code 4 Armor™





For government agencies, law enforcement departments and private security organizations that need ballistic protection for their facilities/ structures, tools, vehicles and/or canine support teams, Code 4 Armor™ is a multi-impact, customizable, monolithic armor technology.

Unlike competitive products, Code 4 Armor uses cermet metallic technology, a composite material composed of ceramic and metal, which provides multiple-hit survivability. Code 4 Armor affords superior protection while reducing product weight and production costs.

Features

- Provides stopping power equal to steel armor
- Weighs half as much as steel armor
- Will not separate like glued, layered construction
- Does not fragment catastrophically
- Sustains multiple impacts
- Can be mass-produced on an assembly line
- Can be custom-fit and functionally graded for specific applications

Benefits

- Decreases final product weight
- Better meets protection needs in a combat zone
- Lowers cost by eliminating handwork and reducing material waste
- Improves safety by eliminating weak points caused by glued construction
- Increases comfort

Applications

- Embassies, hotel lobbies, teller booths, checkpoints
- Structures and barriers
- Exterior surfaces of air and land vehicles and fuel tanks
- Sniper shields
- Police/military canines
- Perimeter security

Patents & Awards

- U.S. Patent Nos. 7,857,193, 8,061,580, and 8,701,970
- Technology Ventures Corporation—featured technology, 2010

Inventor

Edward B. Ripley



Technology Readiness Level (1–9)



Analytical and experimental critical function and/or characteristic proof of concept (prototype for marine propulsion application).

Partnering Opportunities

Y-12 is seeking an industry partner to fully commercialize this technology.

If you would like more information, please contact the Office of Technology Commercialization and Partnerships: OTCP@y12.doe.gov (865) 241-5981 http://www.y12.doe.gov/technologies